

## 4.5. Wildlife

Securing access to country foods is always an important issue in our community as the availability and abundance of harvestable species fluctuates annually. Country foods such as moose, caribou, berries, and fish are essential for maintaining a healthy diet for members of our community. In fact, according to Statistics Canada, 50% of the households in Jean Marie River obtain 75% or more of their meat from the land (moose, caribou, furbearers, waterfowl, etc.).

With changes to seasonal weather patterns, to the conditions and quality of rivers and lakes, and to permafrost being caused or compounded by climate change; animals are also being directly and indirectly impacted by these changes. Most notably has been the decline of many small mammals common to the area such as beaver, rabbit, muskrat, and porcupines; and the small predators that feed on these animals such as foxes and weasels. Members of JMR have also noticed the decline in the number of migratory birds returning to the JMR area. There have also been increased sightings of animals rarely seen in the area, such as whitetail deer, cougars, crows, magpies, and skunks.

Fish are also being reported to be less abundant from lakes and rivers in the area, and more fish from the Mackenzie River are being found dead, or have sores and other deformities. Moreover, fish from this river are very soft and when cooked the meat turns mushy. People in our community will no longer eat fish from the Mackenzie River because they consider the fish to be unhealthy and inedible.

“The fish from the lakes are still good, but the fish from the Mackenzie River are very different, the flesh is watery, does not taste good. During the summer Douglas sets out nets and we noticed that many fish have sores, big sores and sometimes they looked like they have something that looks like bubbles.” (*Yvonne Norwegian, November 2010; translated by Margaret Ireland*).

“In the fall time we used to harvest lots of our fish, but now the fish now it’s not so firm anymore, their flesh. ‘Cause we make – ‘cause our Elders used to boil fish and meat, but sometimes the meat just taste like... you end up making fish soup, ‘cause the meat is not so firm anymore, so you could tell it has to do with the – what DFO was telling us was the warming of the water has to do with it (*Stanley Sanguéz, September 2010*).

“The flesh (of fish) used to be good and firm. I set out fish nets mainly for my dogs; many of the fish that I’ve caught have sores. Healthy fish have healthy reddish colour gills and most fish caught do not have healthy reddish coloured gills, they are whitish in colour. Even the whitefish caught in the nets are not good to eat, their flesh are very soft, which makes the fish taste very different. Fish are not good anymore. My father used to go fish-netting at Mills Lake, so two years ago Billy and I spent six days in the area. We caught several fish that have white gills and reddish marks on their bodies. Many fish have sores over their body and many of them do not have any fat.” (*Douglas Norwegian, November 2010; translated by Margaret Ireland; parentheses added*).

“The Mackenzie River, and its tributaries and surrounding lakes once had abundant fish, which were once a staple of most family’s diets are also very scarce. Most JMR people are buying fish from Hay River now. People are reporting that they are catching deformed fish, and there’s mercury in the fish.” (*Margaret Ireland, September 2010*).

In relation to big game animals, participants did not seem to notice much difference in their numbers or behaviour, with the exception of predatory animals, especially black bears. During the fall there has been

increasing sightings of black bears in the community. The black bears are usually spotted around garbage containers. Every year it appears that the bears are becoming less fearful of people and the community is forced to kill some of these bears. The increased sightings of black bear in fall may be linked to the significant decline in the abundance of berries during this season (see the next theme).

“For the last three or four years we are experiencing bear problems. They tend to come into the community. JMR did not experience wolves coming into the community and eating dogs, but our neighbouring community had this problem for several years. Cougar was sighted along the JMR access road. People are frightened of cougar and are saying that the cougars are following the whitetail deer into the region... Bears coming into the community are also not good; I don’t feel comfortable while working in my flower and vegetable garden.” (*Margaret Ireland, September 2010*).

“... the bears have made a comeback, so I think they – they were – there’s one year there was nothing at all. We didn’t see nothing. Another two more years down they come back. Now it’s even more. We had two in the communities we had to just destroy. Too close to the community, and for kids’ safety reasons. And these bears have a lack of berries. There was hard to... berries, that’s why they were so – they are not ready for fall time, they’re just going in the garbage.” (*Angus Sanguetz, September 2010*)

The cause(s) for the decline in the numbers of small mammals and birds is not known; however, with the changes to the landscape (e.g. changing ice conditions, melting permafrost, drying up of wetland areas) the habitats for these small mammals and birds is changing significantly, potentially causing these animals to die out or move to other areas with a more suitable habitat.

**Table 4: Climate Change Observations and Impacts Associated with Wildlife**

Theme	Observations	Impacts	Relation to Health	Vulnerability Ranking	Magnitude	Duration	Ability to Adjust
Wildlife	<ul style="list-style-type: none"> <li>Increased sightings of animals that rarely come so far north (e.g. whitetail deer, coyote, crows, magpies, swans, cougars, and skunks)</li> <li>Decreased abundance of some animals common to the area (e.g. rabbit, muskrat, beaver, porcupines, foxes,)</li> <li>Increased sightings of black bears in the community</li> </ul>	<ul style="list-style-type: none"> <li>New species to harvest</li> <li>Increased competition with animals common to the area</li> <li>Decreased abundance of primary and secondary country foods</li> <li>Reduced abundance of country foods</li> <li>Bears are becoming a threat to the safety of community members and pets</li> </ul>	<ul style="list-style-type: none"> <li>Alternative species to harvest to supplement diet of country foods</li> </ul>	Medium	Strong	Short	Difficult
			<ul style="list-style-type: none"> <li>Certain animals preferred as country foods may be pushed out by animals moving into northern ecosystems</li> </ul>	Low	Weak	Long	Easy
			<ul style="list-style-type: none"> <li>Reduced availability of country foods in the community resulting in more dependence on store bought foods</li> </ul>	High	Weak	Intermediate	Easy
			<ul style="list-style-type: none"> <li>Potential increase in injuries and deaths caused by black bear attacks, and emotional stress from encountering black bears in the community</li> </ul>	High	Weak	Short	Difficult
	<ul style="list-style-type: none"> <li>Poor quality fur of fur bearing mammals that are trapped. In recent years the quality of fur improves near the end of the trapping season</li> </ul>	<ul style="list-style-type: none"> <li>Reduced resources for clothing and income from trapping activities</li> </ul>	<ul style="list-style-type: none"> <li>Less income to cover costs of healthcare</li> </ul>	Medium	Weak	Long	Difficult
			<ul style="list-style-type: none"> <li>Less resources to make traditional clothing and other cultural items</li> </ul>	Medium	Weak	Short	Moderate
	<ul style="list-style-type: none"> <li>Many fish are being found dead, deformed, and generally unhealthy</li> <li>Decreased abundance of fish in the 5 Lakes areas</li> <li>Scientific observations confirm mercury contamination in popular fishing lakes (e.g. McGill Lake, Ekali Lake)</li> <li>Fish in Mackenzie River are mushy and not edible</li> </ul>	<ul style="list-style-type: none"> <li>Decreased abundance and diminished quality of important country foods (e.g. arctic grayling, suckers, loche)</li> </ul>	<ul style="list-style-type: none"> <li>Reduced availability of country foods in the community resulting in more dependence on store bought foods</li> </ul>	High	Medium	Long	Difficult
			<ul style="list-style-type: none"> <li>Increased risk of contamination from heavy metals (e.g. mercury)</li> </ul>	High	Strong	Long	Difficult
			<ul style="list-style-type: none"> <li>Erosion of cultural relationship with the environment</li> </ul>	High	Medium	Long	Difficult
	<ul style="list-style-type: none"> <li>Very few migratory birds (e.g. ducks, geese, terns, black birds) are returning to Jean Marie River in the spring</li> </ul>	<ul style="list-style-type: none"> <li>Reduced abundance and availability of country food</li> <li>Evidence of changes to the boreal ecosystem</li> </ul>	<ul style="list-style-type: none"> <li>Reduced availability of country foods in the community resulting in more dependence on store bought foods</li> </ul>	Low	Weak	Long	Easy
			<ul style="list-style-type: none"> <li>Erosion of cultural relationship with the environment</li> </ul>	Medium	Weak	Long	Easy